

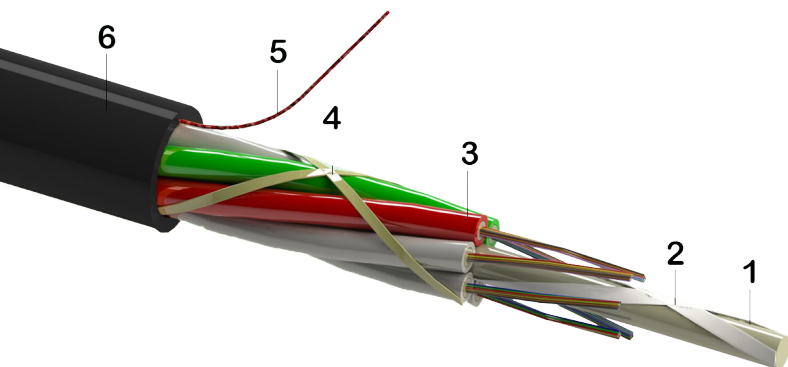
Microcables

Cable construction code

MT.x1,5AF xx.yy.zz.c

DIN code

J/A-DQ(ZN)H nx1,5



1. FRP central strength member
2. Water swellable yarn
3. Gel filled PBT loose tube with optical fibers
4. Water swellable aramid yarn
5. Rip-cord
6. FRLSZH UV stable outer jacket

Cable general description

Multi Loose Tube non-metallic micro-cable for indoor or outdoor installation to micro-tubes.

Construction and dimensions	MT6x1,5AF	MT8x1,5AF	MT3x1,5AF
Max. fiber count (12 fibers/tube)	72	96	144
Loose-tubes count	6	8	12
Loose tube nominal diameter (mm)	1,55	1,55	1,55
FRP/coat. CSM nominal thickness (mm)	1,7	2,5	2,5 / 4,5
Outer jacket nominal thickness (mm)	1,0	1,0	1,0
Cable nominal outer diameter (mm)	6,8	7,6	9,6
Cable informative weight (kg/km)	50	64	95
Standard put-up length (m)	2100 / 4100±5%	2100 / 4100±5%	2100 / 4100±5%

Outer jacket

Material	UV stable FRLSZH
Jacket colour	Black. Other colours available on request
Sheath marking	Ink-Jet, white or black depending on the jacket colour
Print legend	Construction name, cable type, batch-number, meter-marking, CE marking, Customer print legend available on request

Optical fibers

Colour coding (IEC 60304)	1.-12.: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink
Loose-tube colour coding	1.red, 2.green, rest of tubes white (fillers uncoloured or black)
Fiber type	Single- and multi-mode fibers (OS2, OM2, OM3, OM4, OM5)

Geometrical and transmission parameters are available at separate generic datasheet

Microcables

Mechanical characteristics

Test	Test method	Value	Acceptance criteria*			
			MT6x..	MT8x..	MT3x..	
Tensile performance	EN 60794-1-21:E1	short term	600 N	1200 N	1400 N	$\Delta\alpha \leq 0,05$ dB after test
Crush	EN 60794-1-21:E3A	1000 N/100mm (short term)			$\Delta\alpha \leq 0,05$ dB after release, no damage	
Impact	EN 60794-1-21:E4	5 Nm, 3 impacts, d = 20 mm, R = 300 mm			$\Delta\alpha \leq 0,05$ dB after test, no damage	
Repeated bending	EN 60794-1-21:E6	R = 40 x cable diameter, 25 cycles			no damage	
Torsion	EN 60794-1-21:E7	L = 1 m, rotation angle $\pm 180^\circ$, 10 cycles			no damage	
Kink	EN 60794-1-21:E10	d = 40 x cable diameter			no damage	
Bend no tension	EN 60794-1-21:E11A	R = 40 x cable diameter, 4 turns, 3 cycles			$\Delta\alpha \leq 0,05$ dB after test, no damage	

Environmental characteristics

Test	Test method	Value	Acceptance criteria*
Temperature cycling	EN 60794-1-22:F1	-40°C ÷ 70°C	$\Delta\alpha \leq 0,05$ dB
Temperature range of use		-5°C ÷ 50°C -40°C ÷ 70°C -40°C ÷ 70°C	installation operation storage, transport
Moisture resistance	EN 60794-1-22:F5B	L = 3 m, 1 m water height, 24 h	no water leakage

* EN 60794-5-10

Fire performance

Flammability - cable bundle	EN 60332-3-22 (cat.A)	Pass
Smoke density	EN 61034-1, EN 61034-2	Pass
Halogen Free, Acid gases	EN 50575, EN 13501-6	Pass
Euro classification to CPR		Fca

Cable expected lifetime / min. 30 years

Order information

Construction	Diameter	CPR	Fiber count	OM3	OM4	G652.D	G657.A1
MT6x1,5AF	Ø 6,8		4 x 8f 32f	04.08.M3.B	04.08.M4.B	04.08.S2.B	04.08.S7.B
			4 x 12f 48f	04.12.M3.B	04.12.M4.B	04.12.S2.B	04.12.S7.B
			6 x 6f 36f	06.06.M3.B	06.06.M4.B	06.06.S2.B	06.06.S7.B
			6 x 8f 48f	06.08.M3.B	06.08.M4.B	06.08.S2.B	06.08.S7.B
			6 x 12f 72f	06.12.M3.B	06.12.M4.B	R851115	06.12.S7.B
MT8x1,5AF	Ø 7,6		8 x 8f 64f	08.08.M3.B	08.08.M4.B	08.08.S2.B	08.08.S7.B
			8 x 12f 96f	08.12.M3.B	08.12.M4.B	08.12.S2.B	08.12.S7.B
MT3x1,5AF	Ø 9,6		12 x 8f 96f	12.08.M3.B	12.08.M4.B	12.08.S2.B	12.08.S7.B
			12 x 12f 144f	12.12.M3.B	12.12.M4.B	R851116	12.12.S7.B

Order code e.g.: MT3x1,5AF 12.08.M3.B (see page 136/137)

Other fiber counts and/or fiber types (e.g. G657.A2) on special request